

National Park Service
2014 Environmental Achievement Awards

Winner

High Performance Sustainable Visitor and Research Center
Mesa Verde National Park

At Mesa Verde National Park, the Visitor and Research Center (VRC) consists of two building components: the Visitor Information Center and the Research Museum and Collection Facility (Curatorial Facility). Together, they form one building – the VRC. Following a organizing effort of over 14 years, the VRC has been completed as a highly sustainable facility, earning the prestigious LEED Platinum Certification.

The process that lead to the development of the VRC started over 14 years ago, with commitment of support from the Intermountain Region (IMR) of the National Park Service. What followed was a highly collaborative planning and development project with environmental stewardship at the center. A multidisciplinary A/E team worked diligently to complete special studies, define compliance requirements and create various design documents so that the construction award could be made. Construction was successfully awarded in September 2010. In May 2013, the final construction modification was completed.

The LEED Platinum designation recognizes exceptional environmental performance in the new VRC. The project has reduced potable water use by 40.7%, and an energy reduction of 30% below ASHREA 90.1 standards. This was accomplished in part through high-efficiency mechanical systems, including Ground Loop Heat Exchanger; a main mechanical plant, a water-to-water heat pump, radiant floor slabs that provide heat (and some cooling) in designated areas, and active chilled beams that provide supplemental cooling. The VRC also features a variety of onsite renewable energy systems, including: 67 kw photovoltaic array (PV); 64 SF solar water heating system; and a micro hydro-turbine, which produces 25.74% of total building energy.

The project was also awarded a “Two-Star Rating” from the Sustainable Sites Initiative (SITES). The VRC was a pilot project for SITES. The SITES program is an interdisciplinary effort to create voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices.

This project was successful thanks to the dedication of the all partners: MEVE, IMR, Mesa Verde Foundation, Mesa Verde Museum Association, National Renewable Energy Lab (NREL), Federal Highway Administration, Harper’s Ferry Center, tribal representatives, the construction contractor, construction management representatives and many groups within the Denver Service Center of the National Park Service.